Project Design Phase Proposed Solution Template

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| Date | 26 June2025 |
| Team ID | LTVIP2025TMID31972 |
| Project Name | Health AI:Intelligent Healthcare Assistance using IBM Granite |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in the proposed solution template.

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| **S.No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Limited accessibility to accurate, personalized healthcare information. Users struggle with symptom interpretation, treatment planning, health tracking, and reliable medical advice. |
| 2. | Idea / Solution description | HealthAI leverages IBM Watson Machine Learning and Generative AI (Granite-13b-instruct-v2) to provide: - **Disease Prediction** (symptom analysis) - **Personalized Treatment Plans** - **Health Analytics Dashboard** - **Patient Chat** for medical queries. |
| 3. | Novelty / Uniqueness | Combines IBM’s advanced AI with a user-friendly Streamlit interface for real-time, data-driven medical insights. Stands out with: - **Multi-feature integration** (diagnosis, treatment, analytics, chat) - **Secure, scalable API-based architecture**. |
| 4. | Social Impact / Customer Satisfaction | - Empowers users to make informed health decisions. - Reduces dependency on overcrowded healthcare systems for minor queries. - Improves preventive care through trend analysis. - **Scenarios 1-4** demonstrate tangible benefits. |
| 5. | Business Model (Revenue Model) | **Freemium Model**: - Free tier: Basic symptom checks and generic advice. - Premium tier: Personalized treatment plans, advanced analytics, and priority chat support (subscription-based). Partnerships with clinics for referrals. |
| 6. | Scalability of the Solution | - Cloud-based (IBM Watson) ensures global accessibility. - Modular design allows adding new features (e.g., lab test integration). - Scalable API infrastructure handles growing user demand. |